

the pyramids. Thus, the center-to-center spacing between the apices of adjacent cube corner prisms would be in the range of about 0.002 ( $=0.003 \times 2/3$ ) to 0.01 ( $=0.015 \times 2/3$ ) inch."

Claims 1, 2, and 15 have been amended to recite the original intent of these claims. More specifically, with reference to attached Figure 2 (submitted for illustrative purposes only), "P" corresponds to the pitch or center to center spacing of the prisms labeled "A". This pitch or center to center spacing of the "A" prisms, as defined on page 11, lines 21 - 25 of the specification, directly corresponds to the length of the base. The center to center spacing referred to by the Examiner (as calculated by Stamm (U.S. Pat. 3,712,706) in Fig. 10B) is from the "A" prisms to the "B" prisms.

Applicants have discovered a particular range of prism sizes where significant changes from 90 degrees in the prism dihedral angles do not result in a significant change in the amount of light retroreflectivity. This allows the manufacture of a retroreflective sheeting that is very thin while requiring less exactness in forming the prism dihedral angles to retain a uniform retroreflective brightness. With prisms of a larger size than claimed, such as the Van Arnem prisms, slight differences in the dihedral angles among the prisms of the retroreflective sheeting have a significant effect on the retroreflectivity. With prisms smaller in size than the claimed prisms, the light scattering phenomenon exceeds the diffraction of light while the brightness of the retroreflected light decreases to an ineffective amount.

Thus, the claims have been amended such that the length of the base is in the range of between 0.0005 and 0.003 inches which is not anticipated nor suggested by Van Arnem, or any combination of the cited references. Van Arnem, as stated by the Examiner in the Office Action mailed December 9, 1998, discloses at column 7, lines 1-4 cube corner trigonal pyramids having a side of about 0.003 to about 0.015 inch along the side of the base of the pyramids.

The Examiner rejected Claims 17-18 under 35 U.S.C. § 102(b) as being anticipated by Stamm. The rejection is respectfully traversed.

Stamm discloses, for example, at column 3, line 65 through column 4, line 2, that the cube corners are configured so that the angular divergence of the retroreflected light attributable

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to diffraction is the dominant diverging factor. Applicants respectfully suggest that this does not anticipate the claimed invention of Claim 17 which recites that the cube corner prisms "diffract **essentially all** retroreflected light" (emphasis added). Claim 18 depends from Claim 17 and thus includes this patentable distinction.

Therefore, Applicants' claimed invention meets the requisites of 35 U.S.C. § 102.

Rejections under 35 U.S.C. §103(a)

The Examiner rejected Claim 4 under 35 U.S.C. § 103(a) as being unpatentable over Van Arnam in view of U.S. Pat. No. 5,558,740 (the '740 Patent). The rejection is respectfully traversed.

Although the '740 Patent discloses the concept of seaming together several prism arrays, it does not provide the limitations of amended Claim 1 not disclosed in Van Arnam as described above. Thus, the two references combined do not teach all the limitations of Claim 4.

The Examiner rejected Claim 6 under 35 U.S.C. § 103(a) as being unpatentable over Van Arnam in view of Walter (U.S. Pat. No. 5,171,624).

Although Walter discloses the concept of tilting cube corner elements, it does not provide the limitations of amended Claim 1 not disclosed in Van Arnam as described above. Thus, the two references combined do not teach all the limitations of Claim 6.

SUMMARY AND CONCLUSIONS

Applicants' amended claimed invention is not anticipated by Van Arnam under 35 U.S.C. § 102(b). Applicants' claimed invention is not obvious under 35 U.S.C. § 103 in view of the cited references, either individually or in combination. Reconsideration and withdrawal of the rejection of the claims are requested.

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If a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,

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